# Captcha

Are you a bot?

| Evelyn says to James: "It's a beautiful day | , isn't it?" |
|---|--------------|
| Who is Evelyn talking to? (case sensitive)  |              |
|   |              |

Intro\_Consent

#### CONSENT FORM

**DESCRIPTION:** You are invited to participate in a research study in cognitive psychology. **As a participant in this study, you will read two short stories. Then, you will be asked a couple of questions about the content of this story.** All information collected will remain confidential.

RISKS AND BENEFITS: Risks involved in this study are the same as those normally associated with using a computer (e.g., mild eye/arm strain). If you have any pre-existing conditions that might make reading and completing a computer-based survey strenuous for you, you should probably elect to not participate in this study. If at any time during the study you feel unable to participate because you are experiencing strain, you may end your participation without penalty. We cannot and do not guarantee or promise that you will receive any benefits from this study. Your decision whether or not to participate in this study will not affect your employment/medical care/grades in school.

**TIME INVOLVEMENT:** Your participation in this experiment will take ca. 5 minutes.

**PAYMENTS:** In return for participating we will pay you \$0.9 in your MTurk account. . .

**SUBJECT'S RIGHTS:** If you have read this notice and have decided to participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. You have the right to refuse to answer particular questions. Your individual privacy will be maintained in all published and written data resulting from the study.

**CONTACT INFORMATION:** If you have any questions, concerns or complaints about this research study, its procedures, risks and benefits, you may contact the primary investigators by e-mailing Lara Kirfel @ucjulki@ucl.ac.uk.

**INDEPENDENT CONTACT:** If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a participant, please contact Lara Kirfel @ucl.ac.uk.uk.

You may want to print a copy of this consent form to keep. By clicking the button below, you acknowledge that you have read the above information, that you are 18 years of age, or older and give your consent to participate in our internet-based study and consent for us to analyze the resulting data.

#### Thank you for your participation in this experiment!

#### Instructions:

As a reminder, in this experiment, you will read two short stories and answer a couple of questions about these short stories.

The short stories are similiar to some extent, but differ in important aspects. It is therefore very important that you read each story as carefully as possible. Each story comes in two parts. You will be asked a couple of comprehension questions about the first part of the story, and it is crucial that you answer these questions to the best of your knowledge. After the second part of the story, you will be asked a couple of questions about the content of these stories.

If you are ready, click on the button below to continue.

#### Hospital - does not know.

Please imagine the following scenario:

(Part 1)

Dr Jones works as doctor in a local hospital. Dr Jones often administers her patients the blood-thinning drug "Heparine" in order to prevent thrombosis and blood clots. Normally, blood-thinning drugs do not cause any side effects with certain blood types.

The hospital has recently started to order an additional blood-thinning drug, "Afibo", that is cheaper than "Heparine". "Afibo" is as effective as "Heparine", but has one side effect. It causes mild leg cramps in patients with blood type 'AB-positive'.

Because the drug "Afibo" has only recently been ordered, Dr Jones **does not know** that this drug causes mild leg cramps in patients with blood type 'AB-positive'.

Please answer the following questions:

The new blood-thinning drug "Afibo"...

- O causes mild leg cramps in patients with blood type 'AB-positive'.
- causes sore throat in patients with blood type 'AB-positive'.

Dr Jones ...

- O knows that "Afibo" causes side effects in patients with blood type 'AB-positive'.
- O does not know that "Afibo" causes side effects in patients with blood type 'AB-positive'.

### (Part 2)

One day, Dr Jones is treating a patient. Checking the patient's medical record, Dr Jones sees that the patient has blood type 'AB-positive'. Dr Jones does not know that the new blood thinner "Afibo" causes mild leg cramps in people with blood type 'AB-positive'.

Dr Jones administers "Afibo" to that patient. The drug helps to prevent the patient's onset of thrombosis, but the patient also suffers from mild leg cramps.

Please rate how much you agree or disagree with the following statement:

### "Dr Jones caused the patient's leg cramps."

| Strongly Disagree |   |   |   | Strongl | y Agree |   |   |
|-------------------|---|---|---|---------|---------|---|---|
|                   | 1 | 2 | 3 | 4       | 5       | 6 | 7 |

The next question is concerned with your thoughts about how the course of events in the scenario you just read could have gone differently.

In the following text box, we would like you to write down what could have gone differently so that the patient would not have suffered mild leg cramps.

(Your answer can be as short or long as you want; it does not need to fit exactly into the structure of the following example sentence.)

| "lf     | , the patient would not have suffered | , the patient would not have suffered leg |  |  |  |
|---------|---------------------------------------|---|--|--|--|
| cramps. |                                       |   |  |  |  |
|         |                                       |   |  |  |  |
|         |                                       |   |  |  |  |
|         |                                       |   |  |  |  |
|         |                                       |   |  |  |  |

#### Interim

Thank your for your participation so far.

To continue with the next scenario, click the button below.

## Hospital - does know

Please imagine the following scenario: (Part 1) Dr Smith works as doctor in a local hospital. Dr Smith often administers her patients the bloodthinning drug "Sanguin" in order to prevent thrombosis and blood clots. Normally, blood-thinning drugs do not cause any side effects with certain blood types. The hospital has recently started to order an additional blood-thinning drug, "Corus", that is cheaper than "Sanguin". "Corus" is as effective as "Sanguin", but has one side effect. It causes mild leg cramps in patients with blood type 'B-negative'. Although the drug "Corus" has only recently been ordered, Dr Smith **knows** that this drug causes mild leg cramps in patients with blood type 'B-negative'. Please answer the following questions: The new blood-thinning drug "Corus" O ... causes mild leg cramps in patients with blood type 'B-negative'. ... causes sore throat in patients with blood type 'B-negative'. Dr Smith O ... knows that "Corus" causes side effects in patients with blood type 'B-negative'. O ... does not know that "Corus" causes side effects in patients with blood type 'Bnegative'. (Part 2) One day, Dr Smith is treating a patient. Checking the patient's medical record, Dr Smith sees that the patient has blood type 'B-negative'. Dr Smith knows that the new blood thinner "Corus" causes mild leg cramps in people with blood type 'B-negative'. Dr Smith administers "Corus" to that patient. The drug helps to prevent the patient's onset of thrombosis, but the patient also suffers from mild leg cramps.

Please rate how much you agree or disagree with the following statement:

## "Dr Smith caused the patient's leg cramps."

|             | Strongly Disagree                        |         |            | Strongly Agree |               |             |                  |
|-------------|--|---------|------------|----------------|---------------|-------------|------------------|
|             | 1  | 2       | 3          | 4              | 5             | 6           | 7                |
|             | uestion is concern<br>ou just read could |         | _          |                | v the course  | e of events | in the           |
|             | wing text box, we vatient would not h    |         | -          |                |               | e gone dif  | ferently so      |
| •           | ver can be as shor<br>wing example sent  | •       | s you want | t; it does no  | t need to fit | exactly int | to the structure |
| "If         |  |         | , th∈      | e patient wo   | uld not hav   | e suffered  | leg cramps."     |
|             |  |         |            |                |               |             |                  |
|             |  |         |            |                |               |             |                  |
| Garden -    | does NOT know                            | W       |            |                |               |             |                  |
| Please imag | gine the following sc                    | enario: |            |                |               |             |                  |
| ,           |  |         |            |                |               |             |                  |

Bob is a gardener in a local botanical garden and takes care of a very delicate type of rose, the *China rose*. Bob regularly fertilizes the roses with the fertilizer "Vitax" in order to keep them alive and healthy. The botanical garden supplies all gardeners who work in the botanical garden with gardening tools, chemicals and fertilizer. Normally, fertilizers do not harm delicate roses.

The garden manager has recently started to order an additional fertilizer, "Nutrit", that is cheaper than "Vitax". "Nutrit" is as effective as "Vitax", but also has a negative effect. It harms delicate rose types such as the China rose.

Because the new fertilizer has only recently been ordered, Bob **does not know** that it harms delicate rose types such as the China rose.

| Please answer the following questions:  |
|---|
| The new fertilizer "Nutrit"   |
| O harms the China rose.   |
| O harms tulips.   |
|   |
| Bob   |
| O knows about "Nutrit"'s harmful effect.  |
| O does not know about "Nutrit"'s harmful effect.  |
|   |
| (Part 2)  |
| One day, Bob takes care of the China roses in the botanical garden. Bob does not know that the new fertilizer "Nutrit" harms China roses. |
| Bob fertilizes the China roses with the fertilizer "Nutrit". As a result of the fertilization, the China roses die.                       |
|   |

Please rate how much you agree or disagree with the following statement:

#### "Bob caused the China roses to die."

| Strongly Disagree |   |   |   | Strongl | y Agree |   |   |
|-------------------|---|---|---|---------|---------|---|---|
|                   | 1 | 2 | 3 | 4       | 5       | 6 | 7 |

The next question is concerned with your thoughts about how the course of events in the scenario you just read could have gone differently.

| In the following text box, we would like the China roses would not have died   | e you to write down what could have gone differently so that d.  |
|--|--|
| (Your answer can be as short or long a of the following example sentence.)     | as you want; it does not need to fit exactly into the structure  |
| "If  | , the China roses would not have died."  |
|  |  |
| Garden - knows   |  |
| Please imagine the following scenario:   |  |
| (Part 1)   |  |
| Bourbon rose. Alex regularly fertilizes healthy and alive. The botanical garde | garden and takes care of a very delicate type of rose, the the roses with the fertilizer "Flora" in order to keep them en supplies all gardeners who work in the botanical garden ertilizer. Normally, fertilizers do not harm delicate roses. |
|  | rted to order an additional fertilizer, "Splendor", that is effective as "Flora", but also has a negative effect. It harms on rose.  |
| Although the new fertilizer has only recrose types such as the Bourbon rose.   | cently been ordered, Alex <b>knows</b> that it harms delicate  |
|  |  |

Please answer the following questions:

The new fertilizer "Splendor"

O ... harms the Bourbon rose.

| O harms tiger lilies.  |
|--|
|  |
| Alex   |
| O knows about "Splendor"'s harmful effect.   |
| O does not know about "Splendor"'s harmful effect.   |
|  |
| (Part 2)   |
| One day, Alex takes care of the Bourbon roses in the botanical garden. Alex knows that the new fertilizer "Splendor" harms Bourbon roses |

fertilizer "Spiendor" harms Bourbon roses.

Alex fertilizes the Bourbon roses with the fertilizer "Splendor". As a result of the fertilization, the Bourbon roses die.

Please rate how much you agree or disagree with the following statement:

#### "Alex caused the Bourbon roses to die."

| Strongly Disagree |   |   |   | Strongl | y Agree |   |   |
|-------------------|---|---|---|---------|---------|---|---|
|                   | 1 | 2 | 3 | 4       | 5       | 6 | 7 |

The next question is concerned with your thoughts about how the course of events in the scenario you just read could have gone differently.

In the following text box, we would like you to write down what could have gone differently so that the Bourbon roses would not to have died.

(Your answer can be as short or long as you want; it does not need to fit exactly into the structure of the following example sentence.)

| "lf  | , the Bourbon roses would not have died."   |
|--|---|
|  |   |
|  |   |
|  |   |
| Bakery - not know  |   |
| Please imagine the following scenario:   |   |
| (Part 1)   |   |
| including nut allergy friendly cakes, muff   | bakery in town. The bakery offers a variety of pastries,<br>ins and cookies. Anne uses flour of the brand "Green<br>es all necessary baking products including flour.<br>of nuts. |
| The bakery manager has recently starte cheaper than "Green Farms". "Homester one aspect. It contains traces of hazelnu | d to order an additional flour brand, "Homestead", that is ad" is of the same quality as "Green Farms", but differs in its.   |
| Because the new flour has only recently traces of hazelnuts.   | been ordered, Anne <b>does not know</b> that it contains  |
| Please answer the following questions:   |   |
| The new flour of the brand "Homestead"   |   |
| O contains traces of hazelnuts.  |   |
| O contains traces of pistachios.   |   |
| Anne   |   |
| O knows that "Homestead" contains  | s traces of nuts.   |
| O does not know that "Homestead"   | contains traces of nuts.  |

| ( | Р | а | r | t | 2 | ١ |
|---|---|---|---|---|---|---|
|   |   |   |   |   |   |   |

One day, Anne is baking an allergy friendly cake for a customer with nut allergy. Anne does not know that the "Homestead" flour includes traces of hazelnuts.

Anne uses the "Homestead" flour for the cake. As a result of using this flour, the customer suffers from an allergic reaction.

Please rate how much you agree or disagree with the following statement:

Strongly Disagree

## "Anne caused the customer's allergic reaction."

Strongly Agree

|                    | 1            | 2            | 3            | 4             | 5              | 6           | 7                |
|--------------------|--------------|--------------|--------------|---------------|----------------|-------------|------------------|
|                    |              |              |              |               |                |             |                  |
|                    |              |              |              |               |                |             |                  |
| The next question  | on is concei | ned with y   | our though   | nts about ho  | w the cours    | se of event | s in the         |
| scenario you jus   | t read could | have gone    | e differentl | <i>y.</i>     |                |             |                  |
| In the following t | ext box, we  | would like   | you to writ  | te down wha   | at could hav   | /e gone dif | ferently so tha  |
| the customer w     | ould not ha  | ave had ar   | allergic r   | eaction fro   | m the cake     | Э.          |                  |
| (Your answer ca    | n be as sho  | rt or long a | s you wan    | t; it does no | ot need to fit | exactly in  | to the structure |
| of the following e |              | _            | ,            | ,             |                | ,           |                  |
|                    |              |              |              |               |                |             |                  |
| "lf                |              |              | , the cı     | ustomer wo    | uld not have   | e had an a  | llergic          |
| reaction."         |              |              |              |               |                |             |                  |
|                    |              |              |              |               |                |             |                  |
|                    |              |              |              |               |                |             |                  |
|                    |              |              |              |               |                |             |                  |
|                    |              |              |              |               |                |             |                  |
|                    |              |              |              |               |                |             |                  |

Please imagine the following scenario: (Part 1) Sandra is a baker who works for the local bakery in town. The bakery offers a variety of pastries, including nut allergy friendly cakes, muffins and cookies. Sandra uses flour of the brand "White Mill" when baking. The bakery provides all necessary baking products including flour. Normally, flour does not contain traces of nuts. The bakery manager has recently started to order an additional flour brand, "Harvest", that is cheaper than "White Mill". "Harvest" is of the same quality as "White Mill", but differs in one aspect. It contains traces of walnuts. Although the new flour has only recently been ordered, Sandra knows that it contains traces of walnuts. Please answer the following questions: The new flour of the brand "Harvest" O ... contains traces of walnuts. ... contains traces of almonds. Sandra O ... knows that "Harvest" contains traces of nuts. ... does not know that "Harvest" contains traces of nuts. (Part 2)

One day, Sandra is baking an allergy friendly cake for a customer with nut allergy. Sandra knows that the "Harvest" flour includes traces of walnuts.

Sandra uses the "Harvest" flour for the cake. As a result of using this flour, the customer suffers from an allergic reaction.

Please rate how much you agree or disagree with the following statement:

# "Sandra caused the customer's allergic reaction."

| Strongly Disagree                     |     |   | Strongly Agree |              |               |             |                 |    |
|---------------------------------------|-----|---|----------------|--------------|---------------|-------------|-----------------|----|
|                                       | 1   | 2 | 3              | 4            | 5             | 6           | 7               |    |
| The next question<br>scenario you jus |     |   | _              |              | w the course  | e of events | in the          |    |
| In the following t                    |     |   | -              |              |               | _           | ferently so tha | ıt |
| (Your answer ca                       |     | _ | s you want     | ; it does no | t need to fit | exactly int | o the structure | Э  |
| "If<br>reaction."                     |     |   | , the cu       | ıstomer wo   | uld not have  | e had an al | lergic          |    |
|                                       |     |   |                |              |               |             |                 |    |
| Demographic                           | es  |   |                |              |               |             |                 |    |
| What is your a                        | ge? |   |                |              |               |             |                 |    |
|                                       |     |   |                |              |               |             |                 |    |
|                                       |     |   |                |              |               |             |                 |    |

What is your gender?

| Male                               | Female                     | N.A.                 | Non-binary            |
|------------------------------------|----------------------------|----------------------|-----------------------|
| 0                                  | 0                          | 0                    | 0                     |
|                                    |                            |                      |                       |
|                                    |                            |                      |                       |
| End                                |                            |                      |                       |
|                                    |                            |                      |                       |
| Please comment<br>for improvement. | if you had any issues with | the survey or if hav | e further suggestions |
| Then click on the                  | arrow to receive your payr | nent code.           |                       |
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